

Title (en)
Nozzle for cold spray and cold spray apparatus using the same

Title (de)
Düse zum Kaltgasspritzen und Vorrichtung mit solch einer Düse

Title (fr)
Buse de projection par gaz froid et appareil utilisant celle-ci

Publication
EP 1700638 B1 20090304 (EN)

Application
EP 05012931 A 20050615

Priority
• KR 20050019727 A 20050309
• KR 20050019732 A 20050309

Abstract (en)
[origin: EP1700638A1] Disclosed is a nozzle for cold spray and a cold spray apparatus using the same. The nozzle for cold spray includes a hollow-type nozzle section. The nozzle section includes a convergence inlet section (2) in which the cross-sectional area is converging, a throat area (5) connected to the convergence end point of the inlet section (2), and an outlet section (6) connected to the end point of the throat area (5). The nozzle for cold spray is provided with a spray tube (20) located inside the convergence inlet section (2), the spray tube (20) having a spray hole (12) formed at its end point in such a way as to be placed at the throat area (5) or the outlet section (6) beyond the throat area (5). The speed of the powder flow at the outlet end point of the outlet section (6) reaches 300 - 1,200 m/s.

IPC 8 full level
B05B 7/14 (2006.01); **B05B 7/20** (2006.01)

CPC (source: EP US)
B05B 7/1486 (2013.01 - EP US); **C23C 24/04** (2013.01 - EP US); **B05B 7/162** (2013.01 - EP US)

Cited by
CN103764295A; EP2554273A1; AU2012282573B2; EP2289630A1; EP2574408A1; CN112922276A; US10220398B2; US11898986B2; WO2007091102A1; US11935662B2; WO2013007673A1; TWI602617B; US11662300B2

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